

title

author

institute

thanks

location

Example 3: Fuel efficiency

Fuel efficiency: the English measure it in miles per gallon, the French in gallons per mile. (Well, in L/km, really, but it's the x^{-1} transform that interests us.)

obs	type	mpg	gpm
1	1	1	1
2	1	4	0.25
average 1		2.5	0.625
3	2	2	0.5
4	2	2	0.50
average 2		2	0.5

Which question does each model answer? Why do they not agree?

Raising things to a power, then taking the mean – the order in which you do it matters, *yes*.

Example 3: Fuel efficiency

Fuel efficiency: the English measure it in miles per gallon, the French in gallons per mile. (Well, in L/km, really, but it's the x^{-1} transform that interests us.)

obs	type	mpg	gpm
1	1	1	1
2	1	4	0.25
average 1		2.5	0.625
3	2	2	0.5
4	2	2	0.50
average 2		2	0.5

Which question does each model answer? Why do they not agree?

Raising things to a power, then taking the mean – the order in which you do it matters, *yes*.

Example 3: Fuel efficiency

Fuel efficiency: the English measure it in miles per gallon, the French in gallons per mile. (Well, in L/km, really, but it's the x^{-1} transform that interests us.)

obs	type	mpg	gpm
1	1	1	1
2	1	4	0.25
average 1		2.5	0.625
3	2	2	0.5
4	2	2	0.50
average 2		2	0.5

Which question does each model answer? Why do they not agree?

Raising things to a power, then taking the mean – the order in which you do it matters, *yes*.